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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/001,721	10/30/2001	Shell S. Simpson	10007661-1	8457

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HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P.O. Box 272400  
Fort Collins, CO 80527-2400

EXAMINER
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BAYARD, DJENANE M

ART UNIT	PAPER NUMBER
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2141

DATE MAILED: 07/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/001,721	Applicant(s) SIMPSON ET AL.	
	Examiner Djenane M. Bayard	Art Unit 2141	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on 18 April 2005.  
 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
 6) ☒ Claim(s) 1-14 is/are rejected.  
 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:  
         1. ☐ Certified copies of the priority documents have been received.  
         2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This is in response to amendment filed on 4/18/05 in which claims 1-14 are pending.

#### ***Response to Arguments***

2. Applicant's arguments have been fully considered but they are not persuasive. Therefore, this case is made **final**.

3. As per claim 1 and 11, Applicant argues that prioritizing the printing of these print job is based on the estimated processing times, irrespective of the order in which the print jobs are received and/or when deferred start times have been established. However, Shah clearly teaches the system develops a custom priority scheme based on the file header. The custom priority scheme allows a user to override any RET generated priority. For example, if a user has an important color print job with a long RET, the custom priority scheme will allow this particular print job to be advanced before other prints jobs, regardless of their RET. The custom priority scheme will look at the RET estimates and any override flags that may be set and schedule jobs accordingly (See col. 4, lines 52-64).

#### ***Claim Rejections - 35 USC § 1124.***

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1 and 11 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The newly introduced limitation "if processing of a second job is requested during a time period that includes any remaining portion of the deferral period and the estimated processing time of the first processing job, an option of reserving a second deferred processing of the second job is provided, the second deferred start time occurring after an estimated completion time for deferred processing of said first processing job" is not described in the specification.

### *Specification*

6. Applicant was required to delete the embedded hyperlink and/or other form of browser-executable code but failed to do so. See MPEP § 608.01. The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code.

### *Claim Rejections - 35 USC § 103*

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

Art Unit: 2141

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1, 4, 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S.

Patent No. 6,327,045 to Teng et al in view of U.S. Patent Application No 6,618,167 to Shah.

a. As per claims 1 and 11, Teng et al teaches a method of: a. accessing from a user's browser a destination service representing at least one production device (See col. 5, lines 49-53, the network client perform system administration utilizing an ordinary network browser application); b. retrieving said user's imaging information by said destination service (See col. 5, lines 59-63); c. selecting among production options provided by said destination service for determining a processing job to process said imaging information using said at least one production device (See (See col. 8, lines 37-45, Menu fields and writable fields for allowing the user to issue system administration commands back for use in controlling the operation of the printer); e. providing said user an option of reserving a deferred start time for deferred processing of said processing job using said at least one production device in accordance with said selected production options (See figure 12 and col. 8, lines 40-45); and f. if said user opts to reserve a start time, then setting a deferred start time, storing said deferred processing job during a deferral period until said deferred start time occurs, and then deferred processing said deferred processing job using said production device in accordance with said selected production options (See col. 8, lines 40-45 and figure 12). However, Teng et al fails to teach such that, if processing of a second job is requested during a time period that includes any remaining portion of the deferral period and the estimated processing time of the first processing job, an option of reserving a second deferred processing of the second job is provided, the second deferred start

Art Unit: 2141

time occurring after an estimated completion time for deferred processing of said first processing job and estimating the time duration required to process said processing job using said at least one production device with said selected production options;

Shah teaches an apparatus and method for documents scheduling in order to improve the productivity of a networked printer. Furthermore, Shah teaches wherein the system develops a custom priority scheme based on the file header. The custom priority scheme allows a user to override any RET generated priority. For example, if a user has an important color print job with a long RET, the custom priority scheme will allow this particular print job to be advanced before other prints jobs, regardless of their RET. The custom priority scheme will look at the RET estimates and any override flags that may be set and schedule jobs accordingly. Then in step S150, the system schedules the documents for printing in an increasing order of their RET estimates. Simple jobs will normally go first and complex jobs thereafter, unless a priority override is in place (See col. 4, lines 62-64) and wherein a document rasterization execution time (RET) scheduling device is incorporated into a networked printing system and each workstations are associated with a print driver component. The print driver component pre-scans a document file and assigns a complexity rating to the document file. The complexity rating takes into consideration the type of document, e.g., color or black and white, whether color graphics are present, the different kinds of fonts and print styles, or the like. The complexity rating is then encoded into a file header (See col. 3, lines 25-50).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate estimating the time duration required to process said processing job using said at least one production device with said selected production options as taught by

Art Unit: 2141

Shah in the claimed invention of Teng et al in order to provide a scheduling scheme that uses an estimated rasterization execution time to improve the productivity of printers (See col. 1, lines 34-36).

b. As per claims 4 and 12, Teng et al in view of Shah teaches the claimed invention as described above. Furthermore, Teng et al teaches estimating the resources required to process said first processing job using said production device with said selected production options (See col. 7, lines 40-45).

9. Claims 2 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,327,045 to Teng et al in view of U.S. Patent Application No 6,618,167 to Shah as applied to claim 1 above, and further in view of U.S. Patent No. 6,332,170 to Ban.

a. As per claim 2, Teng et al in view of Shah teaches the claimed invention as described above. However, Teng et al in view of Shah failed to teach wherein said first processing job is stored in a medium selected from the group consisting of a hard disk and an image store associated with said user's identity.

Ban teaches a printing apparatus with job interrupt capabilities and control method thereof. Furthermore, Ban teaches wherein said processing job is stored in a medium selected from the group consisting of a hard disk and an image store associated with said user's identity (See col. 4, lines 25-29).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate wherein said processing job is stored in a medium selected from the group consisting of a hard disk and an image store associated with said user's identity as taught by Ban in the claimed invention of Teng et al in view of Shah in order to identify information (See col. 4, lines 25-29).

b. As per claim 10, Teng et al in view of Shah teaches the claimed invention as described above. However, Teng et al in view of Shah failed to teach interrupting an existing processing job having a first arrived at priority, that is currently using a production device, such that another processing job can use said production device, said another processing job having a second arrived at priority different from said first arrived at priority.

Ban teaches interrupting an existing processing job having a first arrived at priority, that is currently using a production device, such that another processing job can use said production device, said another processing job having a second arrived at priority different from said first arrived at priority (See col. 5, lines 50-57).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate interrupting an existing processing job having a first arrived at priority, that is currently using a production device, such that another processing job can use said production device, said another processing job having a second arrived at priority different from said first arrived at priority as taught by Ban in the claimed invention of Teng et al in view of Shah in order to provide a printing environment in which the user can obtain prints of a special print job without stagnation of ordinary print jobs (See col. 1, lines 65-67).



10. Claims 3, 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,327,045 to Teng et al in view of U.S. Patent Application No 6,618,167 to Shah as applied to claim 1 above, and further in view of U.S. Patent No. 6,573,910 to Duke et al.

a. As per claim 3, Teng et al in view of Shah teaches the claimed invention as described above. However, Teng et al in view of Shah failed to teach wherein said setting said first deferred start time includes avoiding conflict with unavailable deferred start times of said production device.

Duke et al teaches an interactive distributed communication method and system for bidding on, scheduling, routing and executing a document processing job. Furthermore, Duke et al teaches wherein said setting said deferred start time includes avoiding conflict with unavailable deferred start times of said production device (See col. 11, lines 5-27)

It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate wherein said setting said deferred start time includes avoiding conflict with unavailable deferred start times of said production device as taught by Duke et al in the claimed invention of Teng et al in view of Shah in order to provide a distributed job processing system and method with a plurality of remote job processing locations (See col. 1, lines 10-15).

b. As per claim 5, Teng et al in view of Shah teaches the claimed invention as described above. However, Teng et al in view of Shah failed to teach wherein said setting further

Art Unit: 2141

comprises reserving quantities of said respective resources required to process said first processing job during said deferral period.

Duke et al teaches wherein said setting step f. further comprises the step of reserving quantities of said respective resources required to process said processing job during said deferral period (See 11, lines 5-25).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate wherein said setting step f. further comprises the step of reserving quantities of said respective resources required to process said processing job during said deferral period as taught by Duke et al in the claimed invention of Teng et al in view of Shah in order to provide a distributed job processing system and method with a plurality of remote job processing locations (See col. 1, lines 10-15).

c. As per claim 6, Teng et al in view of Shah teaches the claimed invention as described above. Furthermore, Teng et al teaches wherein said reserved resources required to process said first processing job are monitored during said deferral period (See col. 7, lines 37-40)

11. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,327,045 to Teng et al in view of U.S. Patent Application No 6,618,167 to Shah further in view of U.S. Patent No. 6,573,910 to Duke et al as applied to claim 6 above, and further in view of U.S. Patent No. 6,310,692 to Fan et al.

a. As per claim 7, Teng et al in view of Shah and further in view of Duke teaches the

Art Unit: 2141

claimed invention as described above. However, Teng et al in view of Shah and further in view of Duke et al failed to teach wherein during said deferral period a warning message is displayed whenever any of said reserved resources is depleted to a quantity not greater than said reserved quantity of said reserved resource.

Fan et al teaches a dynamic preventive, centralized printer resource management system and method. Furthermore, Fan et al teaches wherein during said deferral period a warning message is displayed whenever any of said reserved resources is depleted to a quantity not greater than said reserved quantity of said reserved resource (See col.m3, lines 5-12).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate wherein during said deferral period a warning message is displayed whenever any of said reserved resources is depleted to a quantity not greater than said reserved quantity of said reserved resource as taught by Fan et al in the claimed invention of Teng et al in view of Shah and further in view of Duke in order for to the user to investigate and resolve the problem prior for the resources becomes entirely exhausted and to avoid printer down-time and improve the overall efficiency of the print management system (See col. 3, lines 9-26).

b. As per claim 8, Teng et al in view of Shah and further in view of Duke teaches the claimed invention as described above. However, Teng et al in view of Shah and further in view of Duke et al failed to teach wherein during said deferral period said reserved resources are reported as if said reserved quantities of said reserved resources had already been consumed.

Art Unit: 2141

Fan et al teaches wherein during said deferral period said reserved resources are reported as if said reserved quantities of said reserved resources had already been consumed (See col. 3, lines 5-12 and col. 4, lines 40-50).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate wherein during said deferral period said reserved resources are reported as if said reserved quantities of said reserved resources had already been consumed as taught by Fan et al in the claimed invention of Teng et al in view of Shah and further in view of Duke in order for to the user to investigate and resolve the problem prior for the resources becomes entirely exhausted and to avoid printer down-time and improve the overall efficiency of the print management system (See col. 3, lines 9-26).

c. As per claim 9, Teng et al in view of Shah and further in view of Duke teaches the claimed invention as described above. However, It is inherent to one with ordinary skill in the art wherein during said deferral period said warning message is removed if said reserved resources are replenished above said reserved quantity.

12. Claims 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,327,045 to Teng et al in view of U.S. Patent Application No 6,618,167 to Shah as applied to claim 1 above, and further in view of U.S. Patent No. 6,310,692 to Fan et al.

a. As per claim 13, Teng et al in view of Shah teaches the claimed invention as described above. However, Teng et al in view of Shah failed to teach reserving until said deferred start

Art Unit: 2141

time said required resources in quantities sufficient to process said imaging information in accordance with said selected production options.

Fan et al teaches reserving until said deferred start time said required resources in quantities sufficient to process said imaging information in accordance with said selected production options (See col. 4, lines 40-50).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate reserving until said deferred start time said required resources in quantities sufficient to process said imaging information in accordance with said selected production options as taught by Fan et al in the claimed invention of Teng et al in view of Shah in order for to the user to investigate and resolve the problem prior for the resources becomes entirely exhausted and to avoid printer down-time and improve the overall efficiency of the print management system (See col. 3, lines 9-26).

b. As per claim 14, Teng et al in view of Shah teaches the claimed invention as described above. However, Teng et al in view of Shah failed to teach to monitor until said deferred start time said required resources and to display a warning message whenever any of said reserved resources is depleted to a quantity not greater than said reserved quantity of said reserved resource.

Fan et al teaches to monitor until said deferred start time said required resources and to display a warning message whenever any of said reserved resources is depleted to a quantity not greater than said reserved quantity of said reserved resource (See col. 3, lines 3-10 and col. 4, lines 40-50).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate to monitor until said deferred start time said required resources and to display a warning message whenever any of said reserved resources is depleted to a quantity not greater than said reserved quantity of said reserved resource in order for to the user to investigate and resolve the problem prior for the resources becomes entirely exhausted and to avoid printer down-time and improve the overall efficiency of the print management system (See col. 3, lines 9-26).

### *Conclusion*

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Art Unit: 2141

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Djenane M Bayard whose telephone number is (571) 272-3878.

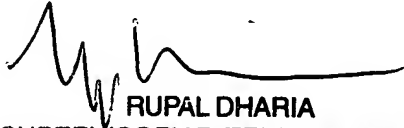
The examiner can normally be reached on Monday- Friday 5:30 AM- 3:00 PM..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on (571) 272-3880. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Djenane Bayard

Patent Examiner

  
RUPAL DHARIA  
SUPERVISORY PATENT EXAMINER